

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1x.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-014688**Date Inspected:** 08-Jun-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1100**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site

CWI Name:	Jesse Cayabyab		
Inspected CWI report:	Yes	No	N/A
Electrode to specification:	Yes	No	N/A
Qualified Welders:	Yes	No	N/A
Approved Drawings:	Yes	No	N/A

CWI Present:	Yes	No
Rod Oven in Use:	Yes	No N/A
Weld Procedures Followed:	Yes	No N/A
Verified Joint Fit-up:	Yes	No N/A
Approved WPS:	Yes	No N/A
Delayed / Cancelled:	Yes	No N/A

Bridge No: 34-0006**Component:** OBG Sections**Summary of Items Observed:**

This Quality Assurance (QA) Inspector, Craig Hager was on site at the job site between the times noted above. This QA Inspector was on site to randomly observe Quality Control (QC) personnel perform Non-Destructive Testing (NDT) and to monitor American Bridge/Fluor (ABF) welding operations.

The following observations were made:

- 1) At weld joint E1/E2 – D1 and D2, outside the Orthotropic Box Girder (OBG) section: ABF welding personnel Mitch Sittinger (#0315) was performing repair welding using the Shield Metal Arc Welding (SMAW) process with QC Inspector Bonifacio Daquinag Jr. present.
- 2) At weld joint E1/E2 – D1 and D2, inside the OBG section: ABF welding personnel Fred Kaddu (#2188) was performing repair welding using the SMAW process with QC Inspector Jesse Cayabyab present.
- 3) At weld joint W1/W2- C1 and C2: ABF welding personnel James Zhen (#6001) and Chun Fai Tsui (#3426) were performing repair welding from outside the OBG using the SMAW process with QC Inspector Bonifacio Daquinag Jr. present.
- 4) At weld joint E3/E4 D1 and D2: ABF personnel were in the process of removing the backing strap and back gouging from outside the OBG sections.

At weld joint E1/E2 – D1 and D2, outside the OBG section this QA Inspector observed ABF welding personnel

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Mitch Sittinger (#0315) performing repair welding using the SMAW process. This QA Inspector observed QC Inspector Bonifacio Daquinag Jr. was present and monitoring the welding. This QA Inspector performed a verification of the welding parameters and observed the following: 132 amperes using a 2.4 mm E7018 electrode in the overhead (4G) position. The welding observed appeared to be in accordance with Welding Procedure Specification (WPS) ABF-WPS-D15-1001-Repair.

At weld joint E1/E2 – D1 and D2, inside the OBG section this QA Inspector observed ABF welding personnel Fred Kaddu (#2188) using a grinder to excavate an area rejected by QC during the Ultrasonic Testing (UT) of the weld. This QA Inspector observed QC Inspector Jesse Cayabyab perform a visual and Magnetic Particle Testing (MT) on the excavation. QC Inspector Jesse Cayabyab informed both ABF welding personnel Fred Kaddu (#2188) and this QA Inspector the area needed additional grinding to remove welding slag. Please see photo below. ABF welding personnel Fred Kaddu (#2188) resumed grinding the excavation area. This QA Inspector observed QC Inspector Jesse Cayabyab perform a visual and MT on the excavation. QC Inspector Jesse Cayabyab informed both ABF welding personnel Fred Kaddu (#2188) and this QA Inspector the defect appeared to have been removed. This QA Inspector performed a random visual verification and observed the excavation was approximately 290 mm long, 25 mm wide and 19 mm deep. The excavation was located at “D2” between the 6th and 7th stiffener from the “E” plate. This QA Inspector observed ABF welding personnel Fred Kaddu (#2188) preheat the weld repair area and start the SMAW to complete the repair weld. Prior to welding this QA Inspector QC Inspector Jesse Cayabyab verify the following welding parameters: 140 amperes using a 3.2 mm E7018 electrode in the flat (1G) position. The preparation of the excavation and welding observed appeared to be in accordance with Welding Procedure Specification (WPS) ABF-WPS-D15-1001-Repair.

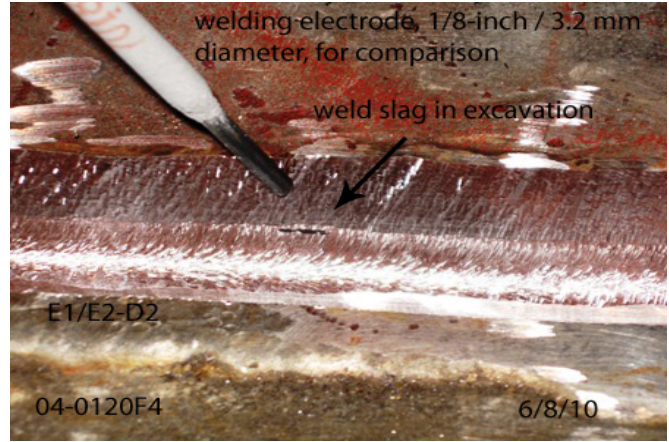
At weld joint W1/W2- C1 and C2, outside the OBG section, this QA Inspector observed ABF welding personnel Chun Fai Tsui (#3426) performing SMAW welding on an excavation located at the “C2” section of the weld and ABF welding personnel James Zhen (#6001) excavating and area located at the “C1” section of the weld. This QA Inspector observed QC Inspector Bonifacio Daquinag Jr. present and monitoring the work. This QA Inspector performed a verification of the welding parameters being used by ABF welding personnel Chun Fai Tsui (#3426) and observed the following: 125 amperes using a 3.2 mm E7018 electrode in the overhead (4G) position. This QA Inspector randomly observed as ABF welding personnel James Zhen (#6001) proceeded with grinding to excavate the repair area. This QA Inspector randomly observed QC Inspector Bonifacio Daquinag Jr. perform a visual and MT inspection of the excavation and informed this QA Inspector the defect appeared to have been removed and was acceptable for welding. Please see photo below. This QA Inspector performed a visual verification of the excavation and observed the excavation was approximately 470 mm long, 20 mm wide, 16 mm deep and started 2, 220 mm from the “B” plate of the OBG. The preparation of the excavation and welding observed appeared to be in accordance with Welding Procedure Specification (WPS) ABF-WPS-D15-1001-Repair.

Summary of Conversations:

As noted above.

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Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammad Fatemi (916) 813-3677, who represents the Office of Structural Materials for your project.

Inspected By: Hager,Craig

Quality Assurance Inspector

Reviewed By: Levell,Bill

QA Reviewer
